

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) Particles suitable for delivery from a particle-mediated delivery device, wherein the particles are obtainable by depositing a nucleic acid on inert metal carrier particles in the presence of

(i) a homopolymer of arginine of the formula (Arg)_x, wherein x is from 2 to 10, or a physiologically acceptable salt thereof; and

(ii) a metal ion chelating agent;

wherein the particles suitable for delivery have a half life of ~~greater than 20~~ at least 27 days at 40° C.

2. (Previously Presented) The particles of claim 1, wherein the inert metal carrier particles are selected from the group consisting of gold, tungsten, platinum and iridium particles.

3. (Previously Presented) The particles of claim 2, wherein the inert metal carrier particles are gold particles having a diameter from about 1 to 3 μm.

4. (Previously Presented) The particles of claim 1, wherein the nucleic acid encodes an antigen.

5. (Previously Presented) The particles of claim 4, wherein the antigen is selected from the group consisting of viral antigens, bacterial antigens and fungal antigens.

6. (Previously Presented) The particles of claim 1, wherein the nucleic acid encodes a therapeutic polypeptide.

7. (Previously Presented) The particles of claim 1, wherein the nucleic acid is DNA.

8. - 11. (Cancelled)

12. (Previously Presented) The particles of claim 1, wherein the homopolymer of arginine is (Arg)₄ or (Arg)₆.

13. (Previously Presented) The particles of claim 1, wherein the metal ion chelating agent is selected from the group consisting of ethylenediamine tetraacetic acid (EDTA) diethylenetriamine penta-acetic acid (DTPA), nitrilotriacetic acid (NTA), inositol hexaphosphate, tripolyphosphate, polyphosphoric acid, sodium succinate, potassium succinate, lithium succinate, sodium malate, potassium malate, lithium malate, desferal and ethylenediamine-di (o-hydroxy-phenylacetic) acid (EDDHA).

14. (Previously Presented) The particles of claim 1, wherein the depositing step is carried out in the presence of one or more disaccharide and/or trisaccharide sugars.

15. (Previously Presented) The particles of claim 14, wherein the sugar is selected from the group consisting of trehalose, sucrose, lactose and raffinose.

16. (Previously Presented) The particles of claim 15, wherein the sugar is a blend of sucrose and raffinose.

17. (Previously Presented) The particles of claim 1, wherein the depositing step is carried out in the presence of one or more salts.

18. (Previously Presented) The particles of claim 17, wherein the salt is selected from the group consisting of potassium acetate, calcium chloride, lithium chloride, sodium acetate, magnesium nitrate, sodium citrate, sodium phosphate and magnesium chloride.

19. (Previously Presented) The particles of claim 1, wherein the resultant particles are contacted with an antioxidant.

20. (Previously Presented) The particles of claim 19, wherein the antioxidant is selected from the group consisting of ethanol, vitamin A, vitamin C and vitamin E.

21. (Previously Presented) The particles of claim 1, wherein DNA is deposited on gold carrier particles in the presence of a polyarginine, EDTA and sucrose.

22. (Previously Presented) A dosage receptacle for a particle-mediated delivery device, the receptacle containing the particles of claim 1.

23. (Previously Presented) A particle mediated delivery device loaded with the particles of claim 1.

24. (Previously Presented) The particle mediated delivery device of claim 23 which is a needleless syringe.

25. (Currently Amended) A process for preparing the particles of claim 1, comprising

(i) depositing a nucleic acid on inert metal carrier particles in the presence of

(a) a homopolymer of arginine of the formula $(\text{Arg})_x$, wherein x is from 2 to 10, or a physiologically acceptable salt thereof; and

(b) a metal ion chelating agent; and

(ii) collecting the resultant particles;

wherein the particles suitable for delivery have a half life of ~~greater than 20~~ at least 27 days at 40° C.

26. (Previously Presented) The process of claim 25, wherein the homopolymer of arginine is added in step (i) to a mixture comprising the inert metal carrier particles and the nucleic acid.

27. (Previously Presented) The process of claim 25, wherein the inert metal carrier particles are selected from the group consisting of gold, tungsten, platinum and iridium particles.

28. (Previously Presented) The process of claim 27, wherein the inert metal carrier particles are gold particles having a diameter from about 1 to 3 μm .

29. (Previously Presented) The process of claim 25, wherein the nucleic acid encodes an antigen.

30. (Previously Presented) The process according to claim 29, wherein the antigen is selected from the group consisting of viral antigens, bacterial antigens and fungal antigens.

31. (Previously Presented) The process of claim 25, wherein the nucleic acid encodes a therapeutic polypeptide.

32. (Previously Presented) The process of claim 25, wherein the nucleic acid is DNA.

33. - 36. (Cancelled)

37. (Previously Presented) The process according to claim 25, wherein the homopolymer of arginine is $(\text{Arg})_4$ or $(\text{Arg})_6$.

38. (Previously Presented) The process of claim 25, wherein the metal ion chelating agent is selected from the group consisting of ethylenediamine tetraacetic acid (EDTA) diethylenetriamine penta-acetic acid (DTPA), nitrilotriacetic acid (NTA), inositol hexaphosphate, tripolyphosphate, polyphosphoric acid, sodium succinate, potassium succinate, lithium succinate, sodium malate, potassium malate, lithium malate, desferal and ethylenediamine-di (o-hydroxy-phenylacetic) acid (EDDHA).

39. (Previously Presented) The process of claim 25, wherein step (i) is further carried out in the presence of one or more disaccharide and/or trisaccharide sugars.

40. (Previously Presented) The process according to claim 39, wherein the one or more sugars is selected from the group consisting of trehalose, sucrose, lactose and raffinose.

41. (Previously Presented) The process according to claim 40, wherein the one or more sugars is a blend of sucrose and raffinose.

42. (Previously Presented) The process of claim 25, wherein step (i) is further carried out in the presence of one or more salts.

43. (Previously Presented) The process according to claim 42, wherein the one or more salts is selected from the group consisting of potassium acetate, calcium chloride, lithium chloride, sodium acetate, magnesium nitrate, sodium citrate, sodium phosphate and magnesium chloride.

44. (Previously Presented) The process of claim 25, wherein the resultant particles from step (i) are contacted with an antioxidant.

45. (Previously Presented) The process according to claim 44, wherein the antioxidant is selected from the group consisting of ethanol, vitamin A, vitamin C and vitamin E.

46. (Previously Presented) The process according to claim 25, comprising the steps of: (i) precipitating DNA on inert gold particles in the presence of a polyarginine, EDTA and sucrose; and (ii) collecting the resultant particles.

47. - 66. (Cancelled)

67. (Currently Amended) Particles, suitable for delivery from a particle mediated delivery device, which comprise inert metal carrier particles having on their surface

(i) a nucleic acid,

(ii) a homopolymer of arginine of the formula (Arg)_x, wherein x is from 2 to 10, or a physiologically acceptably salt thereof, and

(iii) a metal ion chelating agent;

wherein the particles suitable for delivery have a half life of ~~greater than 20~~ at least 27 days at 40° C.

68. (Previously Presented) The particles of claim 5, wherein the antigen is a human papilloma virus antigen.

69. (Previously Presented) The particles of claim 5, wherein the antigen is a HIV antigen.

70. (Previously Presented) The particles of claim 5, wherein the antigen is a HSV2 or HSV1 antigen.

71. (Previously Presented) The particles of claim 5, wherein the antigen is a hepatitis B virus antigen.

72. (Previously Presented) The particles of claim 5, wherein the antigen is an influenza virus antigen.

73. (Previously Presented) The particles of claim 12, wherein the homopolymer of arginine is (Arg)₄.

74. (Previously Presented) The particles of claim of claim 15, wherein the sugar is trehalose.

75. (Previously Presented) The particles of claim 1, wherein DNA is deposited on gold carrier particles in the presence of a polyarginine, EDTA and trehalose.

76. (Previously Presented) The process according to claim 30, wherein the antigen is an influenza virus antigen.

77. (Previously Presented) The process according to claim 40, wherein the one or more sugars is trehalose.

78. (Previously Presented) The process according to claim 25, wherein step (i) further comprises precipitating DNA on inert gold particles in the presence of a polyarginine, EDTA and trehalose.

79. (Previously Presented) The process according to claim 37, wherein the homopolymer of arginine is (Arg)₄.

80. (Previously Presented) The particles of claim 67, wherein the metal ion chelating agent is selected from the group consisting of ethylenediamine tetraacetic acid (EDTA) diethylenetriamine penta-acetic acid (DTPA), nitrilotriacetic acid (NTA), inositol hexaphosphate, tripolyphosphate, polyphosphoric acid, sodium succinate, potassium succinate, lithium succinate, sodium malate, potassium malate, lithium malate, desferal and ethylenediamine-di (o-hydroxy-phenylacetic) acid (EDDHA).

81. (Currently Amended) The particles of claim ~~84~~ 80, wherein the metal chelating agent is EDTA.

82. (Previously Presented) The particles of claim 67, wherein the homopolymer of arginine is (Arg)₄ or (Arg)₆.

83. (Previously Presented) The particles of claim 67, wherein the homopolymer of arginine is (Arg)₄.